Fig. 16A

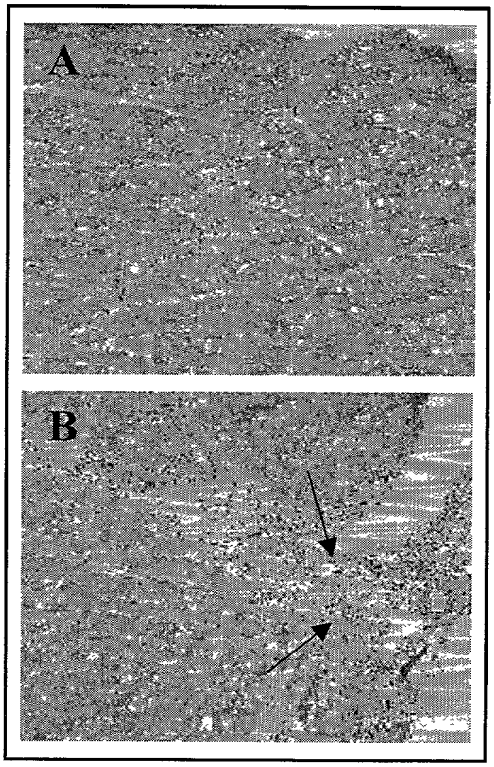

Fig. 16B

Fig. 16C

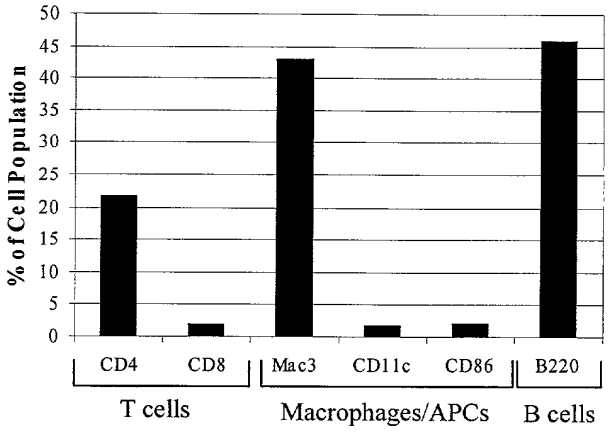

Figure 17

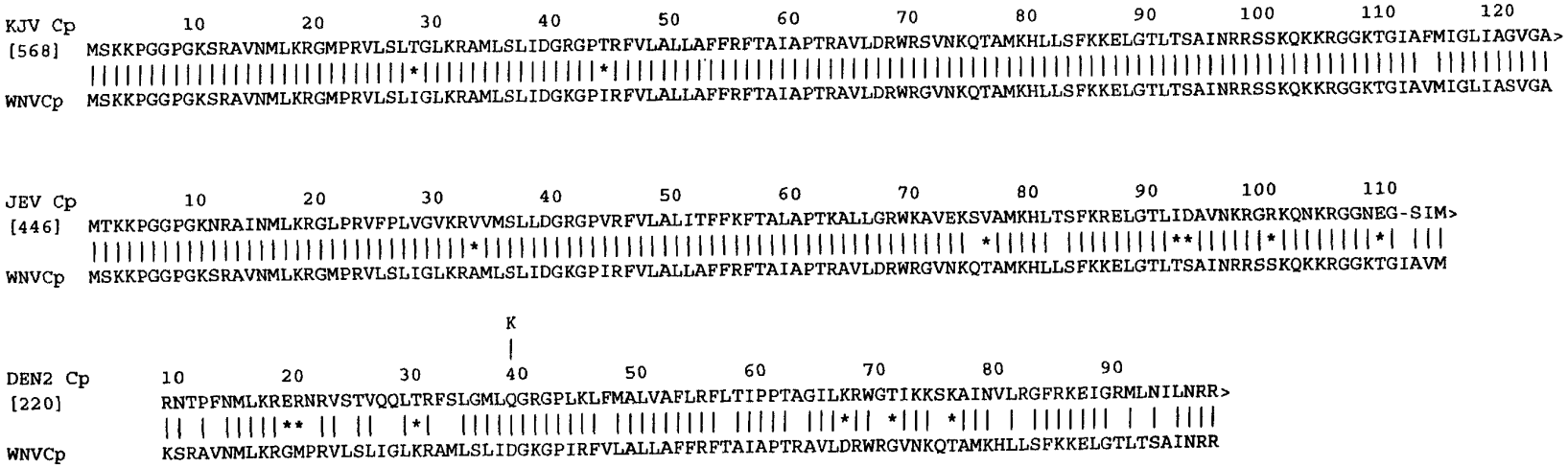
KJV Cp
10 20 30 40 50 60 70 80 90 100 110 120
[568] MSKKPGGPGKSRAVNMLKRGMPRVLSLTGLKRAMLSLIDGRGPTRFVLALLAFFRFTAIAPTRAVLDRWRSVNKQTAMKHLLSFKKELGTLTSAINRRSSKQKKRGGKTGIAFMIGLIAGVGA>
WNVCp MSKKPGGPGKSRAVNMLKRGMPRVLSLIGLKRAMLSLIDGKGPIRFVLALLAFFRFTAIAPTRAVLDRWRGVNKQTAMKHLLSFKKELGTLTSAINRRSSKQKKRGGKTGIAVMIGLIASVGA
JEV Cp
10 20 30 40 50 60 70 80 90 100 110
[446] MTKKPGGPGKNRAINMLKRGLPRVFPLVGVKRVVMSLLDGRGPVRFVLALITFFKFTALAPTKALLGRWKAVEKSVAMKHLTSFKRELGTLIDAVNKRGRKQNKRGGNEG-SIM>
WNVCp MSKKPGGPGKSRAVNMLKRGMPRVLSLIGLKRAMLSLIDGKGPIRFVLALLAFFRFTAIAPTRAVLDRWRGVNKQTAMKHLLSFKKELGTLTSAINRRSSKQKKRGGKTGIAVM
K
DEN2 Cp
10 20 30 40 50 60 70 80 90
[220] RNTPFNMLKRERNRVSTVQQLTRFSLGMLQGRGPLKLFMALVAFLRFLTIPPTAGILKRWGTIKKSKAINVLRGFRKEIGRMLNILNRR>
WNVCp KSRAVNMLKRGMPRVLSLIGLKRAMLSLIDGKGPIRFVLALLAFFRFTAIAPTRAVLDRWRGVNKQTAMKHLLSFKKELGTLTSAINRR

Fig. 18 Alignment of WNVCp protein sequence to other viral proteins

```
Search Analysis for Sequence: WNVCaa          Matrix: pam250 matrix
Search from 1 to 123 where origin = 1         Score Region from 1 to 123
Date: June 15,2001                            Maximum possible score: 590
Time: 19:48:02

Database: UserFolder: Alignment-AC6/01

                    10        20        30        40        50        60        70        80        90       100       110       120
WNVCaa     MSKKPGGPGKSRAVNMLKRGMPRVLSLIGLKRAMLSLIDGKGPIRFVLALLAFFRFTAIAPTRAVLDRWRGVNKQTAMKHLLSFKKELGTLTSAINRRSSKQKKRGGKTGIAVMIGLIASVGA
```

1. HIV-1 89.6 Vpr protein

```
1. HIV-1 89.                  60        70        80        90
[   41 ]              TWTGVEALIRILQQLLFI-HFR-IGCRHSRIGIIQQRRT-RNG>
                       | |||   | | | |  ||  |   || |  |||| | |
WNVCaa                RWRGVNKQTAMKHLLSFKKELGTLTSAINRRSSKQKKRGGKTG
```

2. Herpes Simplex virus major capsid protein

```
                                                                                                  VR
                                                                                                   |
2. HerpesMaj    160       170       180       190       200       210       220       230       240 |  250       260
[   64 ]     AVKTV-ASALQFGVD-ALER-GLINTVLSVKLRHAPPMFILQTLADPTFTERGFSKTVKSDLIAMFKRHLLEHSFF-LDRAENMGSGFSQYSRLSEMVAAVSGESVLKGV>
             | ||  | || ||   |  || |||||  ||  |||  ||  ||  | ||||    || ||  | | |         | ||||| |     || || ||| ||
WNVCaa       PGKSRAVNMLKRGMPRVLSLIGLKRAMLSLIDGKGPIRFVLALLAFFRFTAIAPTRAVLDRWRGVNKQTAMKHLLSFKKELGTLTSAINRRSSKQKKRGGKTGIAVMIGL
```

3. Ebola nuclear protein

```
                                                         S
                                                         |
3. EBOLANucl     200       210       220       230       | 240       250       260       270       280       290       300
[   48 ]     HMMVIFRLMRTN-FLIKFLL-IHQGMHMVAGHDANDAVISNVAQARFSGLLIVKTVLDHILQKTERGVRLHPLARTAKVKNEVNSFKAALSSLAKHGEYAPFARLLNL>
                | | |   || ||  |  | || | ||  ||| || |||||  ||||||     |    | ||   |    ||||  |   |||  | || || |
WNVCaa       KSRAVNMLKRGMPRVLSLIGLKRAMLSLIDGKGPIRFVLALLAFFRFTAIAPTRAVLDRWRGVNKQTAMKHLLSFKKELGTLTSAINRRSSKQKKRGGKTGIAVMIGL
```